

CLAIMS

1. An artificial stone wall panel comprising:
an artificial stone, the composition of which comprises an inorganic fine powder component with a size of from 9.5 mm to 180 μm , an inorganic finely divided component with a size of less than 180 μm and a resin component in an amount of from 7 to 30% by weight based on the total artificial stone composition, the weight ratio of the inorganic fine powder component to the inorganic finely divided component (inorganic fine powder component:inorganic finely divided component) being in a range of from 1:1 to 5:1; and
a support for installing the artificial stone on a wall surface, embedded to the artificial stone,
wherein part of the support is exposed at the back surface or edge surface of the artificial stone.
2. The artificial stone wall panel of claim 1, wherein the artificial stone composition has a cure shrinkage factor of 0.3% or less.
3. The artificial stone wall panel of claim 1 or 2, wherein the artificial stone composition has a density in the range of from 2.0 to 2.8 g/cm³ after curing.

4. The artificial stone wall panel of any one of claims 1 to 3, wherein the support is embedded at a volume ratio of 80% or less with a depth of 80% or less of the total thickness.

5. The artificial stone wall panel of any one of claims 1 to 4, wherein the support is a metal fitting.

6. The artificial stone wall panel of any one of claims 1 to 5, wherein at least 5% by weight of the inorganic fine powder component is a transparent inorganic component.

7. The artificial stone wall panel of any one of claims 1 to 6, wherein the surface has an asperity with a depth (height) of from 1 to 100 mm.

8. A process for producing an artificial stone wall panel, which comprises:

preparing a mixture having a composition comprising an inorganic fine powder component with a size of from 9.5 mm to 180 μ m, an inorganic finely divided component with a size of less than 180 μ m and a resin component in an amount of from 7 to 30% by weight based on the total composition, and a weight ratio of the inorganic fine

powder component to the inorganic finely divided component (inorganic fine powder component:inorganic finely divided component) in a range of from 1:1 to 5:1; filling the mixture into a bottom mold; press-molding a support for installing the artificial stone on a wall surface along with a top mold thereby mold-integrating and embedding the support in a way that part of the support is expose at either the back surface or the edge surface of the artificial stone wall panel.

9. The process for producing an artificial stone wall panel according to claim 8, wherein the press-molding is performed under a pressure of from 1N/cm² to 100 N/cm².

10. The process for producing an artificial stone wall panel according to claim 8 or 9, wherein the resin component is filled in the form of a mixture of two or more of the following: a monomer, an oligomer or a polymer.